buff as in females of comorensis. It could possibly originate from still another population.

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Nesting of the Lappet-faced Vulture Torgus tracheliotus in Oman

by M. D. Gallagher Received 25 April 1982

The status of the Lappet-faced Vulture Torgos tracheliotus in the Arabian Peninsula has for long been obscure. The bird's main base is in Africa, where it has declined markedly in the north (Cramp & Simmons 1980). In Israel the large breeding population discovered by Professor H. Mendelssohn in 1954 had declined to about 3 nesting pairs in 1980 (Bruun 1980, 1981 and Y. Leshem), and only 2 in 1981/82 (H. Mendelssohn in litt. to Dr B. Bruun).

Meinertzhagen (1954) had no reports from the Arabian Peninsula, but I found one dead between Aden and Little Aden on 3 March 1962; in North Yemen it has been seen in December (Thiollay & Duhautois 1976); in Saudi Arabia, where there is now a record of nesting in central Arabia in 1947 and where it may still breed (Jennings 1982), it is a rare winter visitor to northern Hejaz and central Arabia (Jennings 1981); in the United Arab Emirates there are 5 records of these vultures in November and January (Bundy & Warr 1980).

In Oman, its status has been partly obscured by confusion with other species, and searching for the birds in the mountains is difficult. It is certainly a winter visitor, and though a small resident population has been suspected

(Gallagher 1977) this has not been proved until now.

Nesting in Oman

An occupied nest was reported to me by Major J. E. G. Vivian on 16 February 1982. It was situated on a tree at 1440 m a.s.l. on the flank of a valley in the southern part of Jabal Akhdar (Al Jabal Al-Akhdar, the Green Mountain), 120 km SW of Muscat. I found no bird present between 15.00 and 17.00 that day, though one single and 3 others together soared briefly into view far away. I was able to photograph the nest without disturbance to the bird; it contained one warm dull white, brown-spotted egg. Barely 300 m away, the activity and noise of the drilling and blasting of roadworks must have caused some disturbance to the bird, but workers said it had not deserted the nest. At 17.00 one bird returned and settled on the egg, only to leave hurriedly minutes later at the next explosion. I returned early 3 days later (Friday 19 February, a day of rest from roadworks), and found a bird sitting closely. I watched and photographed it from a hide on the mountainside about 120 m away. The sky was overcast, but the bird began to pant at 11.30 and it flew at 11.50 on the first of several alternate periods of soaring and incubating during the day. I saw no second bird.

By 11 March, when the roadworks were by now 1 km away, the bird had deserted the nest, perhaps because of embryonic death caused by exposure, either during enforced absences of the parent(s), or during recent unusually heavy rainstorms. The date of desertion cannot be established, but Major Vivian did not see it on the nest early on 21 February, nor subsequently. On 24 March I removed the cold, faded egg, which measures 95 x 72.6 mm, weighed 244 g and contained a well-formed, half-grown embryo, now

preserved in spirit.

Although the nest is a large structure, it is built into the uneven crown of an isolated and small (3.45 m high) but tree Monotheca buxifolia (formerly Reptonia mascatensis) (Sapotaceae), and it is practically invisible except from above. The nest is bowl-shaped, slightly tilted to the north, longest in its north-south axis (the alignment of the valley and of the prevailing winds), with exterior length 2.14 m, interior length 1.25 m, and interior depth 0.26 m. Constructed of stout sticks, maximum diameter 25 mm, the inner walls and part of the level floor were lined during occupancy with fresh sprigs of Euphorbia larica, herbs and grasses. The central pad of the nest, length 0.48 m, was (on 16 February) lined with soft balls of regurgitated donkey hair, and (on desertion) by tufts of the grass Cymbopogon sp. Three flight feathers were found in March, pressed amongst the sticks of the nest; a fourth lay below the nest as if recently moulted.

In addition to the nest reported above, I have been given reports of very large tree-top nests of vultures (Arabic: nisr) in 3 other locations on Jabal Akhdar, one of which I saw from the cliff high above to have been unoccupied on 16 May. My friends and I have been unable to visit these during the likely breeding season in winter and early spring. There are also reports of large nests on trees on the gravel plains of northern Oman, mostly attributed (presumably wrongly) to Griffon Vulture Gyps fulvus, which is usually a colonial cliff-nester (Cramp & Simmons 1980) and they may in fact have belonged to the Lappet-faced Vulture. Two photographs of one such nest in 1962 or 1963 by H. E. Ennion show a Lappet-faced Vulture standing upon and then flying from it. Ennion told me that the nest contained 2 large young in white down. However, as the Lappet-faced Vulture's clutch is

invariably one (H. Mendelssohn), the possibility is that it was a deserted nest of the Golden Eagle *Aquila chrysaetos* (the breeding of which is reported in Gallagher & Brown 1982) at which the vulture was about to feed.

On 4 April 1981 I saw Lappet-faced Vultures in the zoo at Al Ain, Abu Dhabi, United Arab Emirates, near Buraimi, Oman, which were said to have been brought in when young. Dr Ghassan Ramadan-Jaradi also told Dr Bruun and me that wild Lappet-faced Vultures visit the zoo daily to feed on carrion put out for the zoo animals. There is a strong possibility that these vultures breed locally, probably on Jabal Hafit which straddles the border with Oman; if correct, this would add Jabal Hafit to the nesting localities in northern Oman.

I have more recently been shown photographs of a young Lappet-faced Vulture taken by R. Candlish in 1970. This had been brought to him when very small, from a nest on a tree in the mountains near Saiq, Jabal Akhdar, and raised until nearly fledged. This must constitute the first proof of breeding in Oman. The breeding season in Oman remains to be confirmed. Candlish cannot now recall the month in which he received his bird. If the incubation period is about 55 days, the size of the embryo in the egg of the 1982 nest would indicate that it was laid in January and would have hatched in March. However, other birds, nesting at lower altitudes, may lay earlier.

Identification

Field identification characters of the Lappet-faced Vulture in Oman include the following:- Head and neck: distinctly whitish, covered with white down (a bird in Al-Ain zoo and over 10 years old still retains this down), the skin showing pink on the bare face and through the down only in some lights and when excited; lappets: whitish, reduced to a small fold of skin from ear to foreneck and slight wrinkles on the nape; upper-parts: the brown mantle contrasts with blackish flight-feathers, though this is not so pronounced as in the Griffon Vulture; under-wing: the brown linings have irregular white spots where down is exposed, giving rise to reports of Rüppell's Vulture; a pale streak near the forewing is faint or absent, another streak of white down lies along the base of the flight-feathers; under-body: well covered by the long lanceolate feathers, the flanks in some birds showing whitish; feet: the 'trousers' are medium to dark brown, sometimes ending in white near the bare lower part of the tarsi, which appear whitish like the toes; in soaring flight: the wings are sometimes slightly bowed, as in the Griffon Vulture.

Subspecies

A study of the photographs and descriptions of live Lappet-faced Vultures in Oman and those in the Al Ain zoo has been made by Dr. Bruun, who has kindly offered the following comments: down on the head of the Oman birds persists into adulthood, a characteristic of negevensis, but not of nubicus; on the other hand, the size of the lappets of the Oman birds is greater than those of negevensis, although perhaps not quite so large as in nubicus; the pink colouration (of some Oman birds, in some situations) is brighter than in negevensis and almost as bright as in nubicus and the thighs are dark as in negevensis, although this can be the case in nubicus. Thus the Oman birds do not fully conform with the published descriptions either of negevensis or of nubicus, but appear to be intermediate. This could indicate

either that the Oman birds belong to a separate subspecies, or more likely that there is a cline across Arabia from the northeast African form, *nubicus*, to *negevensis*, with decreasing red colouration of the skin and increasing uniform brown plumage. Dr. Brunn now favours the latter theory, a view shared by the present author.

Status of vultures in Oman

The Lappet-faced Vulture in eastern Arabia has often been confused with the Griffon Vulture, the Rüppell's Vulture G.rueppellii and the Black Vulture Aegypius monachus, particularly in distant views, and the many previously unconfirmed records have bedevilled accurate assessment of the status of all 4 species in the whole region. Furthermore, Brunn (1981 and in litt.) has suggested that the Indian Black Vulture Sarcogyps calvus may possibly occur

in Oman, although I have no evidence for this.

My close observations and photographs of large vultures in Oman since June 1979, and the publication of comparative descriptions of 3 subspecies of *T. tracheliotus* (Brunn 1980, 1981; Brunn et al. 1981) make it certain that the birds which nest on Jabal Akhdar, northern Oman, are of this species, but not of the nominate subspecies (see above). In addition, a re-assessment of observers' reports of large vultures in Oman since 1961 has now been made possible, in some cases with photographic evidence of Lappet-faced and Black Vultures becoming available for the first time; some records, however, remain unconfirmed.

The status of the 4 species in Oman now appears to be as follows, though

further evidence is desirable:-

LAPPET-FACED VULTURE *Torgos tracheliotus*. Winter visitor between August and April. Breeding resident in some northern mountains and foothills; probably also in or near the Dhofar mountains in the south, where individuals have been reported in every month except May and September-December, and pairs in January, March, June and July.

GRIFFON VULTURE Gyps fulvus. Of uncertain occurrence in the north, but

perhaps a very scarce winter visitor there, as in the south.

RÜPPELL'S VULTURE Gyps rueppellii. No certain records. Not to be expected, except in the south. (There are records in southwest Arabia – see Meinertzhagen 1954, Jennings 1981.)

BLACK VULTURE Aegypius monachus. Very scarce winter visitor to north and south; one was killed on Masirah Island on 7 December 1977 (I. P. Ross).

Threats and conservation

The accurate assessment of the size of the resident populations of *Torgos tracheliotus* in northern and southern Oman is difficult because the species appears to live mainly in mountainous country, but numbers are probably very small. Although groups of up to 12 birds have been seen at carrion on the plains in winter, at other times they are seen only occasionally in or near the mountains and usually only singly or in pairs, rarely 4 at once. Contact with humans occurs when birds visit water and village rubbish tips and when the vultures nest or come to carrion near the increasingly used and expanded network of tracks and roads. Although many villagers on Jabal Akhdar know of its presence, there appears to be no enmity against it. However, there are dangers: the 1970 and Al Ain birds were removed from their nests, an adult was reported shot in January 1982, another was killed

by traffic near Ibri as long ago as 1962, and there has been a report that

poisoned bait is occasionally used against the Wolf Canis lupus arabs.

Even if recruits to the very small resident populations may be obtained from amongst the winter visitors, the pressure upon the resident birds by occasional persecution or accident means that they may now be under threat of extinction. It is hoped that the promotion of more public awareness of the beneficial habits of vultures will help alleviate this pressure.

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Nigeria, a new wintering area for the Little Crake Porzana parva

by R. Wilkinson, R. Beecroft and D. J. Aidley Received 9 May 1982

The Little Crake Porgana parva breeds in the western Palaearctic, mostly in central and eastern Europe, Egypt and Algeria. The normal wintering range of those birds breeding in the western Palaearctic is the Mediterranean basin, northeast and east Africa (south to the equator in Kenya and Uganda), possibly Arabia, Iraq and Iran (Cramp & Simmons 1980). Its non-breeding range in northeast Africa is the Sudan, Abyssinia and Uganda (Mackworth-Praed & Grant 1957). Moreau (1972) notes that, with the exception of Senegal, P. parva has not been recorded in Africa west of the Sudan, so that its absence "from the intervening area must be delusive in view of their passage through Maghreb and Libya", an opinion shared by Mackworth-Praed & Grant (1970), who noted one specimen from Senegal but considered that P. parva "is extremely likely to occur elsewhere" in West Africa. The observations reported below fully confirm these authors'